

Appl. No. 09/663,594
Amendment and/or Response
Reply to Office action of 8 November 2005

Page 11 of 15

REMARKS / DISCUSSION OF ISSUES

Claims 1-20 are pending in the application. Claims 12-20 are newly added.

Claims are amended for non-statutory reasons: to correct one or more informalities, remove figure label numbers, and/or to replace European-style claim phraseology with American-style claim language. In like manner, the specification is amended to remove references to the claims, as being inconsistent with US patent practice.

Because the applicants' prior remarks have been unpersuasive and have not had an effect on the allowability of any of the claims of this application, the applicants herein retract and recant all prior remarks regarding the claims and the prior art.

The Office action rejects claims 1-3, 5-8, and 10-11 under 35 U.S.C. 103(a) over Shimizu (USP 4,866,702) and Dean (USP 4,641,375). The applicants respectfully traverse this rejection.

A 'clean' copy of claim 1 as amended is included here for ease of reference:

1. (Currently amended) A network comprising:
a plurality of network nodes, and
a star node that is configured to be coupled to the plurality of network nodes to facilitate communication among the plurality of network nodes,
wherein:
the star node includes a plurality of star interfaces, each star interface of the plurality of star interfaces being assigned to at least one network node of the plurality of network nodes, and
each star interface is configured such that, in dependence on detection of a pilot signal from an assigned network node, the star interface that is assigned to the assigned network node autonomously controls the conveyance of a message from the assigned network node to the other star interfaces and therefrom to the other network nodes.

Both Shimizu and Dean fail to teach or suggest a network that includes star-node interfaces that are each configured such that, in dependence on detection of a pilot signal from an assigned network node, the star interface that is assigned to the assigned network node autonomously controls the conveyance of a message from the assigned network node to the other star interfaces and therefrom to the other network nodes.

Appl. No. 09/663,594
Amendment and/or Response
Reply to Office action of 8 November 2005

Page 12 of 15

Shimizu does not teach the use of a pilot signal. The Office action asserts that Shimuzu teaches conveying a message in dependence upon a pilot signal at column 4, lines 5-7. The referenced text follows:

"[each bus access unit 2 is formed by an] address filter 1, a receive buffer 8, a transmit buffer 9, a bus access controller 10 and a signalling circuit 11, all of which are synchronized with a clock source 12. Arbiter" (Shimizu, column 4, lines 5-7).

As can be seen, the text relied upon for this teaching by Shimizu fails to teach a pilot signal, and specifically fails to teach performing a subsequent action in dependence upon such a pilot signal, as asserted in the Office action.

Further, assuming in argument that Shimizu can be interpreted to include a pilot signal, Shimuzu fails to teach that a star interface that is assigned to the network node that sends the pilot signal autonomously controls the conveyance of a message from the assigned network node to the other star interfaces and therefrom to the other network nodes. Shimizu teaches a conventional contention-based system, wherein the control of communications on the network lies within an Arbiter 3. If Shimizu's Arbiter 3 fails to select a given bus access unit 2, the bus access unit 2 is prohibited from transmitting to the other elements in the network, and Shimizu's bus access unit 2 thus cannot be said to autonomously control the conveyance of the message.

Dean teaches an optical transceiver 8 that provides a pilot signal at half second intervals during each message transmission. Dean does not control the conveyance of the message at the transceiver 8 in dependence upon receipt of the pilot signal; the message is sent regardless of whether the pilot signal is present. Dean's pilot signal detector 25 detects pilot signals generated by other network nodes, but does not autonomously control the conveyance of a message from the assigned network node to the other star interfaces and therefrom to the other network nodes based on this signal, as specifically claimed in claim 1.

Appl. No. 09/663,594
Amendment and/or Response
Reply to Office action of 8 November 2005

Page 13 of 15

Because both Shimizu and Dean fail to teach or suggest a network that includes star-node interfaces that are each configured such that, in dependence upon receipt of a pilot signal generated by an assigned network node, the star interface that is assigned to the assigned network node autonomously controls the conveyance of a message from the assigned network node to the other star interfaces and therefrom to the other network nodes, the applicants respectfully request the Examiner's reconsideration of the rejection of claims 1-3 and 5-8 under 35 U.S.C. 103(a) over Shimizu and Dean.

A 'clean' copy of claim 10 as amended is included here for ease of reference:

10. A network node in a network that includes a plurality of other network nodes, comprising:

a pilot generator that is configured to generate a pilot signal that serves to identify a time frame within which a message is to be transmitted from the network node,

a multiplexer, operably coupled to the pilot generator, that is configured to multiplex the pilot signal and the message to produce an output signal, and

a transmitter, operably coupled to the multiplexer, that is configured to transmit the output signal,

wherein

the network node is configured to be coupled to the network via a star node that communicates the output signal to each of the other network nodes based on a detection of the pilot signal.

Both Shimizu and Dean fail to teach or suggest a pilot signal that serves to identify a time frame within which a message is to be transmitted from the network node.

As noted above, Shimizu fails to teach a pilot signal.

As noted above, Dean's pilot signal is generated independent of the message, and thus cannot be said to serve to identify a time frame within which a message is to be transmitted from the network node.

Because both Shimizu and Dean fail to teach or suggest a pilot signal that serves to identify a time frame within which a message is to be transmitted from the network node, the applicants respectfully request the Examiner's reconsideration of the rejection of claim 10 under 35 U.S.C. 103(a) over Shimizu and Dean.

Appl. No. 09/663,594
Amendment and/or Response
Reply to Office action of 8 November 2005

Page 14 of 15

A 'clean' copy of claim 11 as amended is included here for ease of reference:

11. A star node in a network for coupling a plurality of network nodes, comprising

a plurality of star interfaces, each star interface of the plurality of star interfaces being assigned to at least one network node of the plurality of network nodes,

wherein

each star interface is configured to:

detect a pilot signal generated by a network node that is assigned to the star interface, and

autonomously control each of the other star interfaces to enable transmission of a message associated with the pilot signal to each of the other network nodes in the network.

Both Shimizu and Dean fail to teach or suggest star-node interfaces that are each configured to detect a pilot signal generated by a network node that is assigned to the star interface, and autonomously control each of the other star interfaces to enable transmission of a message associated with the pilot signal to each of the other network nodes in the network, as discussed above with regard to claim 1.

Therefore, the applicants respectfully request the Examiner's reconsideration of the rejection of claim 11 under 35 U.S.C. 103(a) over Shimizu and Dean.

The Office action rejects claim 4 under 35 U.S.C. 103(a) over Shimizu, Kobayashi (USP 5,200,949), and Kobayashi (USP 4,694,453). The applicants respectfully traverse this rejection for being in improper form, for not including Dean, and based on the remarks above regarding claim 1, upon which claim 4 depends.

The Office action rejects claim 9 under 35 U.S.C. 103(a) over Shimizu, Kobayashi (USP 5,200,949), and Schenkyr (USP 5,218,600). The applicants respectfully traverse this rejection for being in improper form, for not including Dean, and based on the remarks above regarding claim 1, upon which claim 9 depends.

Appl. No. 09/663,594
Amendment and/or Response
Reply to Office action of 8 November 2005

Page 15 of 15

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Robert M. McDermott, Attorney
Registration Number 41,508
patents@lawyer.com

1824 Federal Farm Road
Montross, VA 22520
Phone: 804-493-0707
Fax: 215-243-7525